MCD5-1999
User Manual

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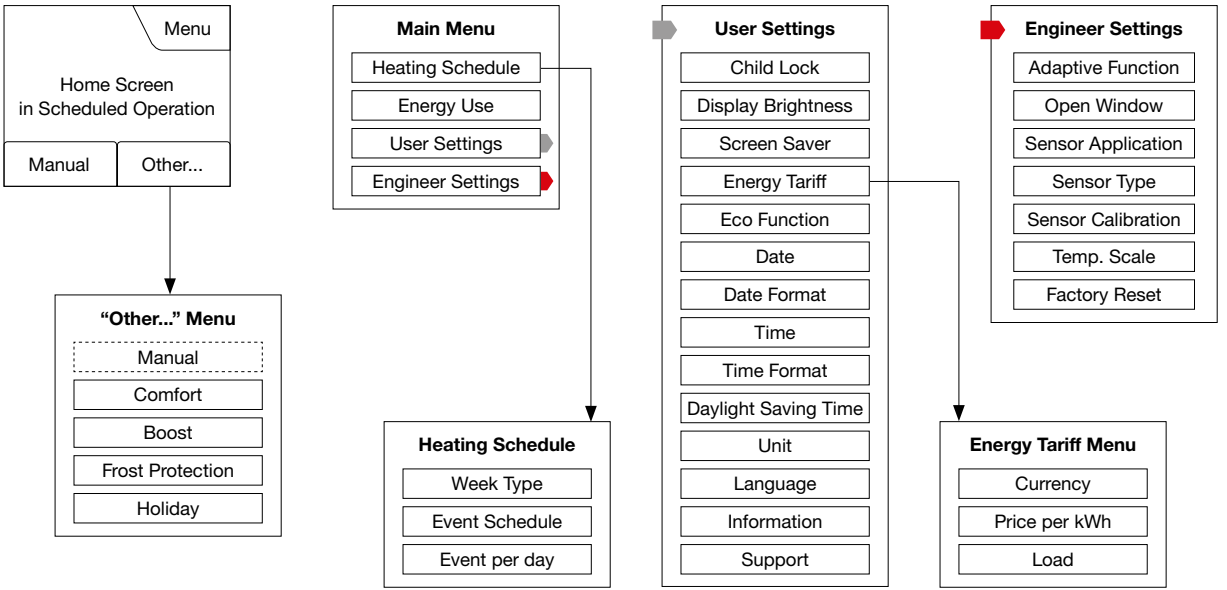
Menu Overview

Menu Structure



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Introduction

Thank you for buying our touch thermostat. We hope you will enjoy the ease of use offered by the touchscreen and intuitively designed interface. You can program the thermostat any way you want with the options provided under Heating Schedule and User Settings.

The thermostat will switch on your heating system at predetermined times each day of the week. You can set individual temperatures for up to six separate periods, called events, for each day of the week. Lowering the temperature when your home is unoccupied will reduce your energy costs without reducing comfort.

The thermostat comes with a preset heating schedule suitable for most homes. Unless you change the settings, the thermostat will operate according to this preset heating schedule.

The thermostat features an adaptive function that automatically changes heating start times to ensure that the required temperature has been reached at the beginning of any specific event. After a few days, the adaptive function will have learned how much earlier the heating must be switched on.

The resistive touchscreen only requires a soft tap with your fingertip to register the touch.
In this manual, the touch areas on the screen will be referred to as buttons.

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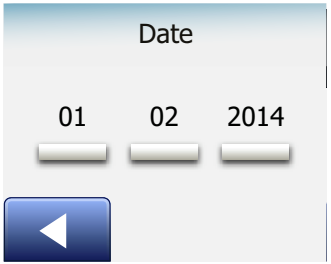
Startup Wizard 1/2



When the system has been installed and turned on for the first time, or after you have performed a factory reset, you must set Region, Language, Date, Time and Floor Type.
The thermostat will automatically guide you through the process.

1. Region – set the time region in which the thermostat is located.
   This parameter is used, for example, to ensure correct use of Daylight Saving Time.
   Tap the time region you are in.
   Confirm with "√"

2. Language – set the language to be used on the thermostat display.
   Tap the language you prefer. Confirm with "√".

3. Date – set the current date.
   Tap the parameter you want to change. Use the "**Up Arrow**" or "**Down Arrow**" button to set the day, month and year.
   Confirm each setting with "√".

4. Time – set the current time.
   Tap the parameter you want to change. Use the "**Up Arrow**" or "**Down Arrow**" button to set the hours and minutes.
   Confirm each setting with "√".

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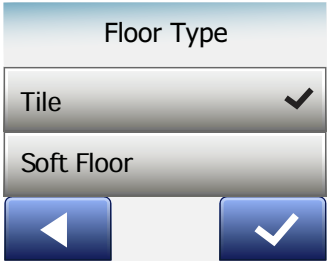
Startup Wizard 2/2



5. Floor Type – choose between:
   Tile: floors made of tile or stone.
   Soft Floor: wooden or other engineered floors.

6. Confirm your choice with "√" or discard it with "**X**".

The thermostat is now ready for use and will control the underfloor heating according to the preset heating schedule. If you want to change the heating schedule, instructions are given in the section titled Heating Schedule.
Details of the preset heating schedule are given in the section titled Factory Settings.

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General Operation

The thermostat has an ON/OFF switch on the left side of the thermostat.

Otherwise, the thermostat is intuitively operated via the high-resolution colour touchscreen, which is used to navigate through the menus and to change the settings.

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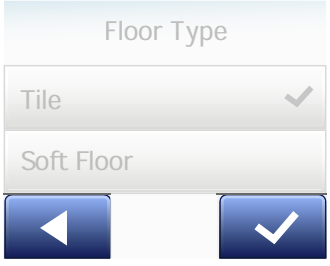
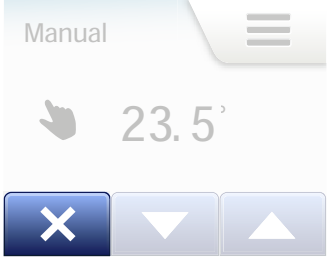
Accept/Back/Cancel





Whenever you change a parameter setting, you must tap the “Accept” button for the thermostat to acknowledge the change.
“Accept” is shown on the screen as “√”.

“Back” is shown on the screen as a button marked with an arrow pointing to the left. In this manual, it is also referred to as the “**Left Arrow**“ button.
In the various menus and submenus, you will find the “Back” button in the lower left corner of the touchscreen.

Tap the “**Left Arrow**” button to return to the previous menu.

“Cancel” is shown on the screen as a button marked “**X**”.

Although “Cancel” has the same effect as “Back”, it also results in all unsaved settings being discarded.

As soon as you leave a home screen and enter one of the menus, either a “Back” button or a “Cancel” button will be shown.

To return to the home screen, tap **Back/Cancel** once or multiple times depending on where you are in the menu structure.

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Icons 1/2

Picture of icon:	Meaning of icon:
	Scheduled Operation
	Manual Override
	Comfort Mode
	Boost Mode
	Frost Protection
	Holiday Mode
	Eco Function
	Menu

Picture of icon:	Meaning of icon:
	Heating Schedule
	Energy Use
	User Settings
	Child Lock
	Display Brightness
	Screen Saver
	Energy Tariff
	Date

Picture of icon:	Meaning of icon:
	Date Format
	Time
	Time Format
	Daylight Saving Time
	Unit
	Language
	Information
	Support

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Icons 2/2

Picture of icon:	Meaning of icon:	Picture of icon:	Meaning of icon:
	Engineer Settings		Factory Reset
	Adaptive Function		Error Message
	Open Window		Accept
	Sensor Application		Cancel
	Sensor Type		Next change in event/function at the given time
	Floor Sensor Calibration		The time is AM
	Room Sensor Calibration		The time is PM
	Temperature Scale		

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Programmed Heating Schedule

The thermostat allows you to control temperature automatically according to a weekly schedule of your choice. The thermostat comes with a pre-programmed schedule for easy and economic heating control of most homes, see Factory Settings: Preset Schedule.

The schedule can be changed in the Heating Schedule menu.

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Operating Modes

The thermostat offers seven different modes of temperature control, either from the "**Other**" menu on the home screen or from the home screen directly:

- Scheduled Operation
- Manual
- Comfort
- Boost
- Frost Protection
- Holiday
- Eco (this function must be enabled in the "**User Settings**" menu)

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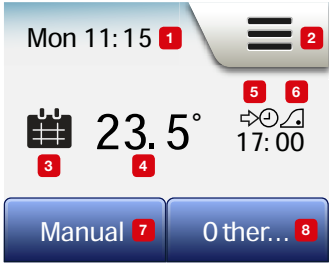
Scheduled Operation



The system will operate in Scheduled Operation unless you choose to override the scheduled events.
During Scheduled Operation, the temperature is controlled automatically according to the programmed heating schedule – see "**Heating Schedule**".

During Scheduled Operation, "**Manual**" and "**Other**" modes are accessible from the home screen. If the Eco function is enabled, "**Eco**" and "**Other**" modes will be accessible from the home screen. "**Manual**" will then be found in the "**Other**" menu.

The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

Scheduled Operation home screen:

1. Day and time info.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (calendar = Scheduled Operation).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. Time of next scheduled event change.
6. If shown, the adaptive function is enabled.
7. Tap here to access Manual Override. Alternatively, if Eco Function is enabled, tapping here activates the function.
8. Tap here to access alternative operating modes (Comfort, Boost, Frost Protection, Holiday). If "**Eco**" is enabled, "**Manual**" will be found here as well.

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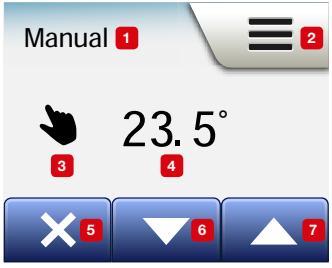
Manual



Manual allows you to override Scheduled Operation and maintain a specified temperature around the clock.

1. From the Scheduled Operation home screen, tap the "**Manual**" button to access manual override.
   Note: If Eco is enabled, "**Manual**" will be found in the "**Other**" menu.
   You can use "**Manual**" to override the programmed event schedule.
   The thermostat will continue to operate in Manual until you return it to Scheduled Operation.
2. Use the "**Up Arrow**" or "**Down Arrow**" button to select the required temperature. Then simply leave the thermostat as it is.

While in Manual Override, an "**X**" button is shown in the lower left corner of the home screen. Press this button to return the thermostat to Scheduled Operation.
The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

Manual home screen:
1. Indication of Manual Override.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (hand = Manual).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. Tap here to return to Scheduled Operation.
6. Tap here to decrease the target/setpoint temperature.
7. Tap here to increase the target/setpoint temperature.

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Comfort 1/2

You can use Comfort mode on special occasions when you want to override an event during Scheduled Operation, e.g. for a party or when you want to stay up late. You can manually set a comfort temperature, which the thermostat will maintain for a chosen period of time (from 1 to 23 hours) before returning to Scheduled Operation.

1. From the Scheduled Operation home screen, tap the "**Other**" button to access the alternative operating modes.
2. Choose "**Comfort**".
3. Tap "√" to confirm that you wish to override the auto heating schedule.
4. Use the "**Up Arrow**" or "**Down Arrow**" button to select the required temperature. Confirm with "√".
5. Use the "**Up Arrow**" or "**Down Arrow**" button to set the required duration of Comfort mode. Confirm with "√". The thermostat automatically enters the Comfort mode home screen.

While in comfort mode an "**X**" button is shown on the home screen. Press this button to return the thermostat to Scheduled Operation.

The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

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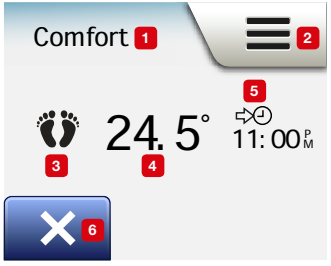
Comfort 2/2



Comfort home screen:

1. Indication of Comfort mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (feet = Comfort).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. The time at which the thermostat will return to Scheduled Operation.
6. Tap here to quit Comfort mode and return to Scheduled Operation.

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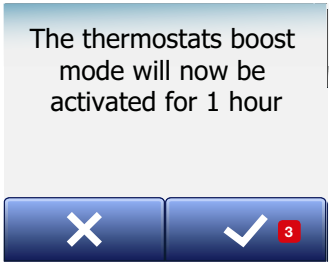
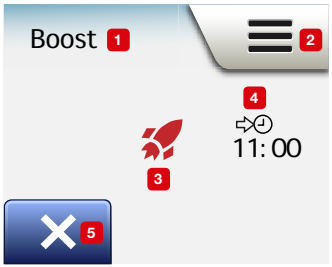
Boost





Boost mode is accessible from the “Other” menu.
In Boost mode, the underfloor heating is constantly activated for one hour. After one hour, the thermostat returns to Scheduled Operation.

1. From the Scheduled Operation home screen, tap the “**Other**” button to access the alternative operating modes.
2. Choose “**Boost**”.
3. Confirm that you wish the thermostat to activate Boost mode by tapping ”√”. The thermostat automatically enters the Boost home screen.

While in Boost mode, an “**X**” button is shown on the home screen. Press this button to return the thermostat to Scheduled Operation.

The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

Boost home screen:
1. Indication of Boost mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (red rocket = Boost).
4. The time at which the thermostat will return to Scheduled Operation.
5. Tap here to quit Boost mode and return to Scheduled Operation.

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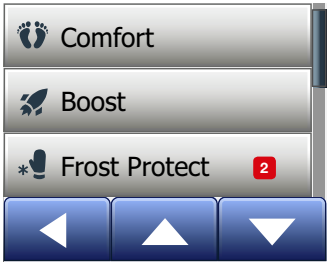
Frost Protection



Frost Protection mode is used when heating is not needed but the temperature must be kept above freezing point until changed manually.

1. Tap the "**Other**" button on the home screen.
2. Tap the "**Frost Protection**" button.
   A confirmation screen will then be displayed briefly before the thermostat automatically enters the Frost Protection home screen.

While in Frost Protection mode an ice crystal and glove are displayed on the home screen together with the target/setpoint temperature (5.0°C).

Frost Protection home screen:

1. Indication of Frost Protection mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (ice crystal and glove = Frost Protection).
4. Fixed target/setpoint temperature (if shown in red, heating is being provided).
5. Tap here to return to Scheduled Operation.

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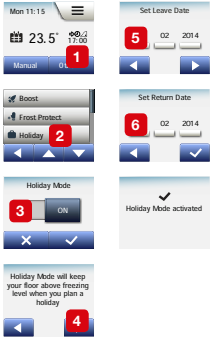
Holiday 1/2



Holiday mode allows you to set the heating of your home to a minimum while you are away on holiday, thus saving energy and money.
You must set the date you leave on holiday and the date you return. The thermostat will ensure that your floor is kept above freezing point and that your home is warm at your return. This is accomplished in just a few steps:

1. From the Scheduled Operation home screen, tap the “Other” button to access the alternative operating modes.
2. Tap the “**Holiday**” button.
3. Tap the “**OFF/ON**” button to “**ON**” and confirm with the “**√**” button.
4. Tap the “**Right Arrow**” button on the confirmation screen that appears.
5. Set the date on which you are going on holiday. Tap the “**Right Arrow**” button.
6. Set the date on which you plan to return. Tap the “**Right Arrow**” button.
   A confirmation screen will then be displayed briefly before the thermostat automatically enters the Holiday home screen.

During an active holiday period a suitcase is displayed on the screen together with the programmed leaving and return dates.
You can cancel an active holiday period and return the thermostat to Scheduled Operation by tapping the “**X**” button.

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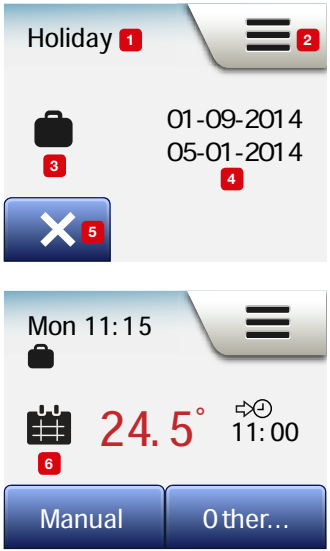
Holiday 2/2



Holiday home screen:

1. Indication of Holiday mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (suitcase = Holiday).
4. The date on which the thermostat entered Holiday mode and the date on which the thermostat will return to Scheduled Operation.
5. Tap here to quit Holiday mode and return to Scheduled Operation.
6. If leaving and returning dates have been entered but Holiday mode is not yet active, an alternative Scheduled Operation home screen will be displayed, featuring a suitcase.

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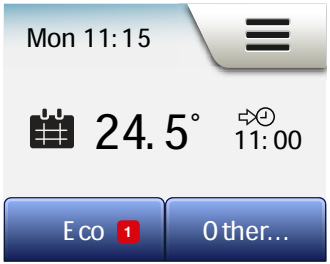
Eco Function



Eco Function reduces the energy spent on unnecessary heating if you leave the room/house during a scheduled heating event.
When the Eco Function is enabled, the thermostat enters an energy-saving state, in which the lowest setback temperature in the event schedule is used as the temperature setpoint. At the next scheduled event change, the thermostat returns to normal Scheduled Operation.
To be able to use the Eco Function, it has to be enabled under **User Settings/Eco Function**

With Eco Function enabled in the User Settings:

1. Tap the "**Eco**" button on the Scheduled Operation home screen to access the Eco Function.
   The thermostat will then display the Eco Function home screen.

Eco Function home screen:

1. Indication of Eco Function.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (leaf = Eco Function).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. The time at which the thermostat will return to Scheduled Operation.
6. Tap here to return to Scheduled Operation.

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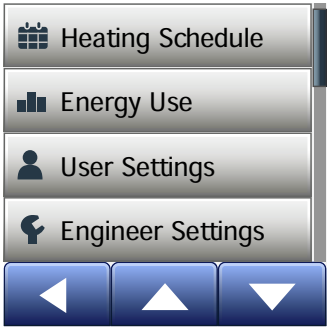
Thermostat Setup - Main Menu



The main menu consists of four options which can be used to configure your thermostat.
The main menu is accessed via the “Menu” button on the home screen.

- Heating Schedule
- Energy Use
- User Settings
- Engineer Settings

Some of the menus have various parameters which can be set.

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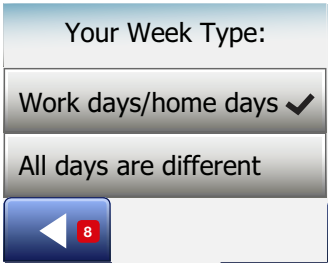
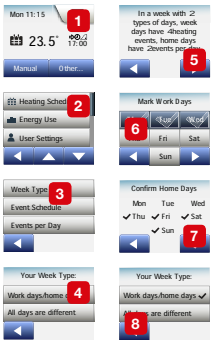
Heating Schedule 1/3





The heating schedule allows you to control temperature automatically according to a programmed schedule of your choice. The thermostat comes with a preprogrammed event schedule for easy and economic heating control, see Preset Schedule under Factory Settings. The heating schedule can easily be changed in the following way:

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**Heating Schedule**” button to access schedule options.
3. Tap the “**Week Type**” button.

Choose between “**Work days/home days**” and “**All days are different**”. “**Work days/home days**” is best if you have fixed working hours.

4. If you chose “**Work days/home days**”,
5. an information screen about the schedule will be shown.
   Tap the “**Right Arrow**” button to proceed.
6. Select the days on which you work.
   Tap the “**Right Arrow**” button to proceed.
7. The thermostat will automatically designate the remaining days as home days.
   Tap the “**√**” button to accept.
8. Tap the “**Left Arrow**” button to return to the “**Heating Schedule**” menu.
   Proceed to step 10.

If you chose “**All days are different**”, each day of the week must be individually programmed, giving you complete control of every single event.

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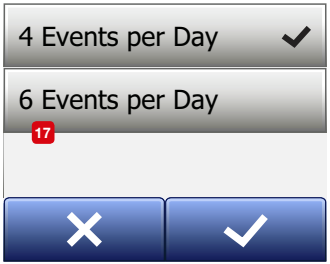
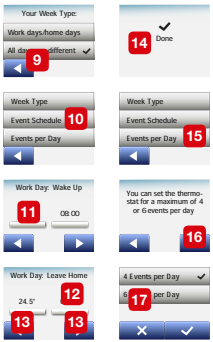
Heating Schedule 2/3





9. Tap the “**Left Arrow**” button on the “**Your Week Type**” screen to exit.
10. Tap the “**Event Schedule**” button to set up the target/setpoint temperature and start time for each event.
11. Tap the temperature if you want to change it, then tap the “**Up Arrow**” or “**Down Arrow**” button to set the required temperature.
12. Tap the time if you want to change it, then tap the “**Up Arrow**” or “**Down Arrow**” button to set the time in steps of 15 minutes. Confirm with “√”.
13. Tap the “**Left Arrow**” or “**Right Arrow**” button to toggle through the various events.
14. Once you have completed setting all the events, tap the “**Right Arrow**” button to view a confirmation screen and return to the Heating Schedule menu.

The thermostat is preset to operate in Scheduled Operation with four events per work day and two events per home day.
This can be changed to six events per work day and two events per home day in the following way:

15. In the “**Heating Schedule**” menu, tap the ”**Events per Day**” button.
16. On the explanation screen, tap the “**Right Arrow**” button.
17. Choose between four and six events per work day. Confirm with “√”.
    Steps 10 to 14 may need to be repeated to set the new events.

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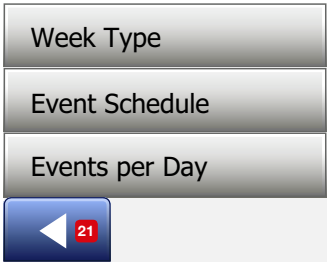
Heating Schedule 3/3



An event is a scheduled time of day when the thermostat automatically changes the temperature setting.
You can choose between a four or six event schedule.

Choose the setting that best fits your daily rhythm.

With a four event schedule, you can set four different events during work days and two different events during home days.
– Perfect if your day is as follows: You get up in the morning, you go to work, you return home and you go to sleep.

With a six event schedule, you can set six different events during work days and two different events during home days.
– Perfect if your day is as follows: You get up in the morning, you go to work, you return home for lunch, you go back to work, you return home and finally you go to sleep.

18. Tap the "**Events per Day**" button.

19. On the confirmation screen tap the "**Right Arrow**" button.

20. Tap the button with the number of events per day you wish to use.

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Energy Use

The “**Energy Use**” button allows you to read out energy usage data for your underfloor heating system.

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**Energy Use**” button to access schedule options.

You can choose between four different readouts:

- Last 7 days: A graph of usage during each day of the past seven days will be displayed. The graph shows hours per day.
- Last month: A graph of usage during each day of the past month will be displayed. The graph shows hours per three days.
- Last year: A graph of usage during each month of the past year will be displayed. The graph shows hours per month.
- An overview of electricity consumption (kWh) and heating costs for the time periods specified above. (Note: actual load, currency and price per kWh must be set in the “Energy Tariff” menu under User Settings).

3. You can toggle between the readouts using the “**Up Arrow**” or “**Down Arrow**” button.
4. Tap the “**Left Arrow**” button to return to the “**Main Menu**”.

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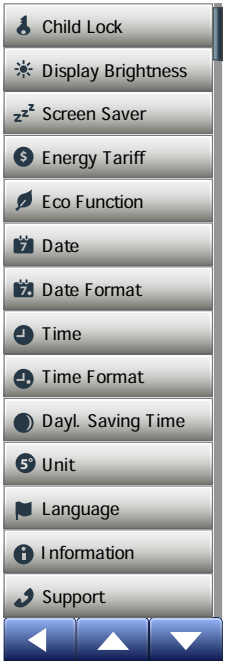
User Settings



This menu allows you to set various parameters. The menu contains the following options:

- Child Lock
- Display Brightness
- Screen Saver
- Energy Tariff
- Eco Function
- Date
- Date Format
- Time
- Time Format
- Daylight Saving Time
- Unit
- Language
- Information
- Support

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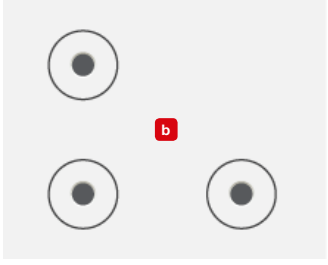
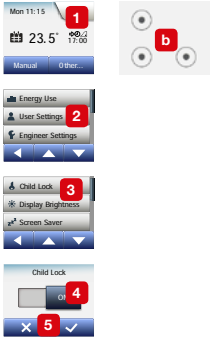
Child Lock





The child lock prevents children and others from tampering with the thermostat and changing any of its settings.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Tap the "**Child lock**" button.
4. Tap the "**OFF/ON**" button to the setting you prefer.
5. Confirm your choice with "√" or discard it with "**X**".
6. The thermostat will automatically return to "**User Settings**".

The child lock is activated together with the screen saver if the thermostat has not been operated for about 3 minutes.
Before you can operate the thermostat again, you must unlock the child lock in the following way.

From the idle home screen:

a) Tap the screen to activate it.
   Three circles containing dots will be displayed on the screen.
b) Draw an "**L**" on the screen in a single stroke without lifting your finger from the screen. Start by touching the dot in the circle in the upper left corner, then slide your finger downwards to the dot in the circle in the lower left corner and continue sliding your finger to the dot in the circle in the lower right corner, forming an "**L**". If done correctly, the home screen will appear.

Please note that the child lock will be reactivated when the thermostat returns to screen saver mode – unless it is deactivated in the menu: **User Settings/Child Lock**.

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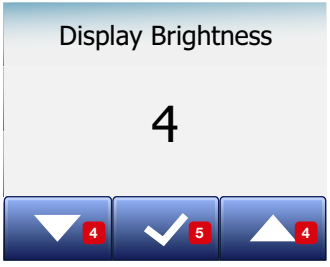
Display Brightness



This option allows you to change the brightness of the display.

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Display Brightness**” button.
4. Select one of the five levels of brightness using the “**Up Arrow**” or “**Down Arrow**” button.
5. Confirm your choice with “**√**”.
   The thermostat will automatically return to “**User Settings**”.

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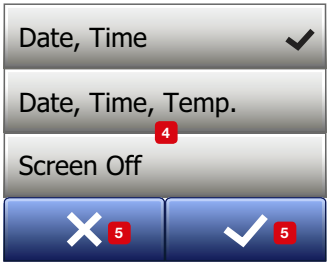
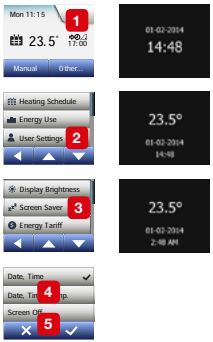
Screen Saver





This option allows you to select the information to be shown on the idle home screen.

- Date, Time.
- Date, Time and Temperature (measured).
- Screen Off. This setting minimises energy consumption.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Scroll down and tap the "**Screen Saver**" button.
4. Tap the information you want to be shown in screen saver mode.
5. Confirm your choice with "**√**" or discard it with "**X**".
   The thermostat will automatically return to "**User Settings**".

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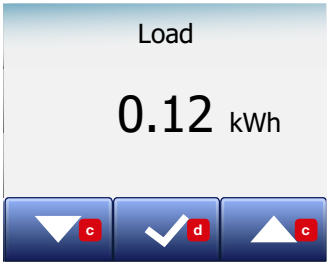
Energy Tariff 1/2



This option allows you to enter the various data used to calculate energy use.

The “**Energy Use**” function uses this information to calculate electricity consumption and the cost of heating for a given period of time.

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Tap the “**Energy Tariff**” button.
4. Tap the parameter you want to change.

- Currency

a) Tap the currency you prefer.
b) Confirm with “√”.
The thermostat will automatically return to “**Energy Tariff**”.

- Price per kWh

a) Tap the “**Up Arrow**” or “**Down Arrow**” button to set the price you pay per kWh.
b) Confirm with “√”.
The thermostat will automatically return to “**Energy Tariff**”.

- Load

a) If you do not want the thermostat to automatically detect the load of your underfloor heating system, tap the “**OFF/ON**” button to “**OFF**”, otherwise leave it at “**ON**”.

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Energy Tariff 2/2

b) Confirm with "√".
c) If Auto Detection is set to "**OFF**", tap the "**Up Arrow**" or "**Down Arrow**" button to set the kW load of your underfloor heating system. You should ask your heating engineer for this information.
d) Confirm with "√".

The thermostat will automatically return to "**Energy Tariff**".

4. Tap the "**Left Arrow**" button to return to "**User Settings**".

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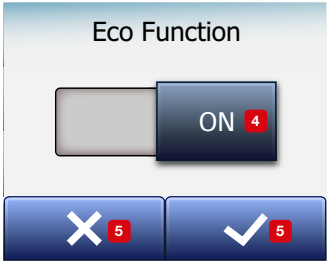
Eco Function



Eco Function reduces the energy spent on unnecessary heating if you leave the room/house during a scheduled heating event.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Tap the "**Eco Function**" button.
4. Tap the "**OFF/ON**" button to the setting you prefer.
5. Confirm your choice with "**√**" or discard it with "**X**".
6. The thermostat will automatically return to "**User Settings**".

With Eco Function enabled, the Scheduled Operation home screen is altered. The lower left button, "**Manual**", is changed to "**Eco**".

Tap the "**Eco**" button to activate the Eco Function.
In Eco Mode, the thermostat enters an energy-saving state, in which the lowest setback temperature in the event schedule is used as the temperature setpoint. At the next scheduled event change, the thermostat returns to normal Scheduled Operation.

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Date

This option allows you to change the date, which is sometimes shown on the home screen and is used for functions such as “Holiday” mode and “Daylight Saving Time”.

1. Tap the “Menu” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Date**” button.
4. Tap the parameter you want to change.
5. Tap the “**Up Arrow**” or “**Down Arrow**” button to set the day, month and year.
6. Confirm each setting with “√”.
7. Tap the “**Left Arrow**” button to return to “**User Settings**”.

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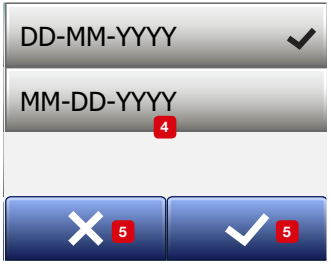
Date Format



1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Date Format**” button.
4. Tap the date format you prefer:

   • DD/MM/YYYY
   • MM/DD/YYYY

5. Confirm your choice with “**√**” or discard it with “**X**”.
   The thermostat will automatically return to “**User Settings**”.

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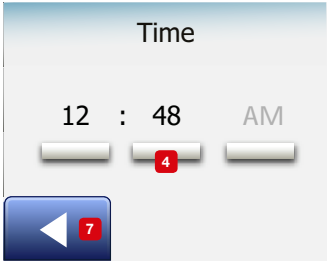
Time



This option allows you to change the time, which is used by the clock to control heating schedule events during Scheduled Operation.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Scroll down and tap the "**Time**" button.
4. Tap the parameter you want to change.
5. Tap the "**Up Arrow**" or "**Down Arrow**" button to set the hours and minutes.
6. Confirm each setting with "√".
7. Tap the "**Left Arrow**" button to return to "**User Settings**".

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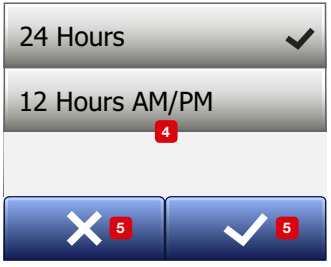
Time Format



1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Time Format**” button.
4. Tap the time format you prefer:

   • 24 Hours
   • 12 Hours AM/PM

5. Confirm your choice with “**√**” or discard it with “**X**”.
   The thermostat will automatically return to “**User Settings**”.

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Daylight Saving Time

When set to ON, the "**Daylight Saving Time**" function will automatically adjust the thermostat clock to the daylight saving time for the "**Region**" chosen in the "**Startup Wizard**".
Note! Only regions within North America and Europe are supported.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Scroll down and tap the "**Daylight Saving Time**" button.
4. Tap the "**OFF/ON**" button to the setting you prefer.
5. Confirm with the "**√**" button.
   The thermostat will automatically return to "**User Settings**".

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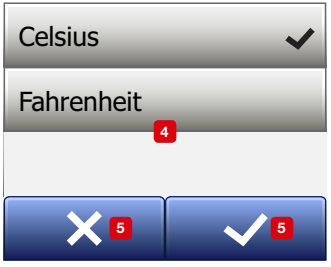
Unit



1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Unit**” button.
4. Tap the unit you prefer:

   • Celsius
   • Fahrenheit

5. Confirm your choice with “**√**” or discard it with “**X**”.
   The thermostat will automatically return to “**User Settings**”.

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Language

This option allows you to change the language used on the screen.

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**User Settings**” button to access the various user settings.
3. Scroll down and tap the “**Language**” button.
4. Tap the language you prefer:

   • English

5. Confirm your choice with “**√**” or discard it with “**X**”.
6. Tap the “**Left Arrow**” button to return to “**User Settings**”.

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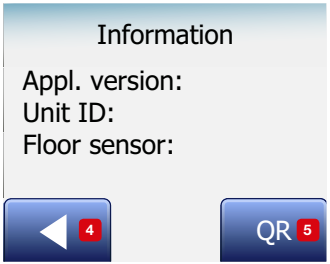
Information 1/2



This option provides a read-out containing the following information:

- Application version
- Unit ID
- Sensor temperatures

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Scroll down and tap the "**Information**" button.
4. Tap the "**Left Arrow**" button to return to "**User Settings**". Or tap the "**QR**" button.
5. If "**QR**" is selected, you can scan the QR Code with a suitable device with access to the Internet. Software supporting QR Code scanning is necessary, e.g. an app. Scanning the QR Code provides the following data from the thermostat:

- Contact
- Serial Number
- Software Version
- Sensor Type
- Application
- Mode
- Adaptive Function
- Open Window
- Child Lock
- Time Format

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Information 2/2

- Temperature Unit
- Heating Schedule
- Energy Use

5. Tap on the QR Code to return to the Information screen.
6. Tap the “**Left Arrow**” button to return to “**User Settings**”.

QR Code is a registered trademark of DENSO WAVE INCORPORATED.

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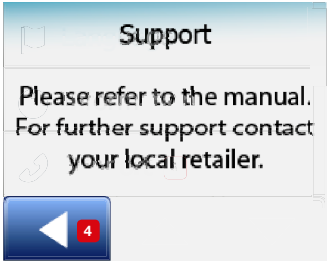
Support



This option provides information on obtaining support for the thermostat.
Please consult the "**Troubleshooting**" section of this manual before calling for any support.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**User Settings**" button to access the various user settings.
3. Scroll down and tap the "**Support**" button.
4. Tap the "**Left Arrow**" button to return to "**User Settings**".

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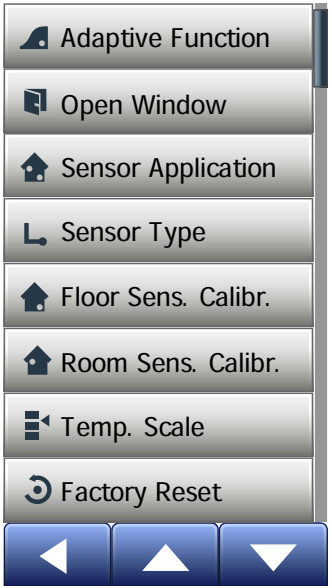
Engineer Settings



This menu contains all the parameters that must be set by the engineer during thermostat installation or service. The menu contains the following options:

- Adaptive Function
- Open Window
- Sensor Application
- Sensor Type
- Floor Sensor Calibration
- Room Sensor Calibration
- Temperature Scale
- Factory Reset

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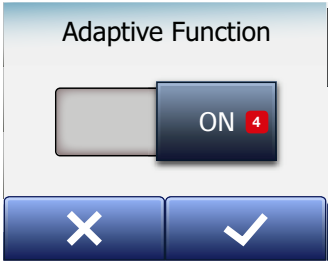
Adaptive Function



With this feature enabled the room will already have reached the target/setpoint temperature at the beginning of an event.
After just a few days, the adaptive function will have automatically calculated how much earlier the heating must be turned on/off to achieve this.
Select "**OFF**" if you simply want the heating to start at the beginning of an event.

1. Tap the "**Menu**" button on the home screen.
2. Scroll down and tap the "**Engineer Settings**" button.
3. Tap the "**Adaptive Function**" button.
4. Tap the "**OFF/ON**" button to the setting you prefer and confirm with the "**√**" button.
5. The thermostat will automatically return to "**Engineer Settings**".

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Open Window

This option allows you to enable the “Open Window” function.
The thermostat can detect an open window by registering a rapid drop in temperature.
With the function enabled, the thermostat shuts off the heating for 30 minutes if an open window is detected.

1. Tap the “**Menu**” button on the home screen.
2. Scroll down and tap the “**Engineer Settings**” button.
3. Tap the “**Open Window**” button.
4. Tap the “**OFF/ON**” button to the setting you prefer and confirm with the “**√**” button.
5. The thermostat will automatically return to “**Engineer Settings**”.

If an open window is detected, the “**Open Window**” screen will appear, allowing the function to be cancelled by tapping “**X**”.

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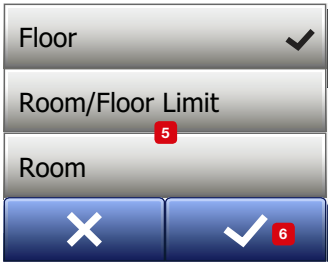
Sensor Application



This option allows you to choose which sensor is used to control the heating system.

- Floor (default): With this setting, the floor sensor controls the heating system.
- Room: With this setting, the room sensor inside the thermostat controls the heating system.
- Room/Floor Limit (advanced): With this setting, the room sensor controls the heating system subject to maximum and minimum limits for floor temperature. The maximum temperature limit protects wooden floors from excessive heat. The minimum temperature limit prevents the floor from becoming uncomfortably cold when heating is not needed, e.g. in a bathroom. Note that this function will increase energy consumption.
  Floor Limit temperatures are set in the “Temperature Scale” menu.

Maximum temperature depends on floor type and temperature scale.

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**Engineer Settings**” button.
3. Tap the “**Sensor Application**” button.
4. Confirm that you want to set the Sensor Application.
5. Then tap the application you want to use.
6. Confirm your choice with “**√**” or discard it with “**X**”.
7. The thermostat will automatically return to “**Engineer Settings**”.

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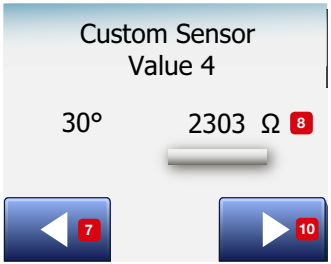
Sensor Type



This option allows you to choose the type of floor sensor used with the thermostat. You can therefore choose to use an existing sensor with the thermostat, e.g. in renovation projects.

Choose the sensor actually used from the list. The sensor supplied with the thermostat is an OJ sensor listed as: “Factory”.

- Factory (default)
- Sensor 10 kΩ
- Sensor 12 kΩ
- Custom

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**Engineer Settings**” button.
3. Scroll down and tap the “**Sensor Type**” button.
4. Tap the type of floor sensor actually used.
5. Confirm your choice with “**√**” or discard it with “**X**”.
6. If “**Custom**” is chosen, you must provide resistance values for the sensor concerned at four given temperatures: 15°C, 20°C, 25°C and 30°C – ask the supplier of your sensor for these values.
7. Use the “**Right Arrow**” or “**Left Arrow**” button to toggle through the temperatures.
8. Tap the resistance value to change it.
9. Tap the “**Up Arrow**” or “**Down Arrow**” button to set the resistance.
10. Then repeat steps 6-9 until all four resistance values have been set.
11. Tap the “**Left Arrow**” button to return to “**Engineer Settings**”.

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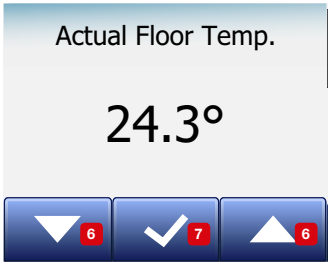
Floor Sensor Calibration



This option allows you to calibrate the floor sensor.

You should calibrate the sensor if the temperature reading differs from the actual floor temperature.
Note that changes in the floor sensor characteristics may damage certain floors.
You can calibrate the sensor with +/- 10°C in steps of 0.5°C in the following way:

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**Engineer Settings**" button.
3. Scroll down and tap the "**Floor Sensor Calibration**" button.
4. Confirm that you want to calibrate the sensor with "**√**" or cancel with "**X**".
5. If "**√**" is chosen, you must then offset the thermostat to reflect the floor temperature actually measured.
6. Use the "**Up Arrow**" or "**Down Arrow**" button to set the measured floor temperature.
7. Confirm the value with "**√**". A confirmation screen will be displayed briefly.
8. The thermostat will automatically return to "**Engineer Settings**".

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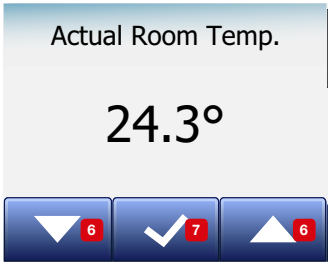
Room Sensor Calibration



This option allows you to calibrate the room sensor.

You should calibrate the sensor if the temperature reading differs from the actual room temperature.
You can calibrate the sensor with +/- 10°C in steps of 0.5°C in the following way:

1. Tap the “**Menu**” button on the home screen.
2. Then tap the “**Engineer Settings**” button.
3. Scroll down and tap the “**Room Sensor Calibration**” button.
4. Confirm that you want to calibrate the sensor with “**√**” or cancel with “**X**”.
5. If “**√**” is chosen, you must then offset the thermostat to reflect the room temperature actually measured.
6. Use the “**Up Arrow**” or “**Down Arrow**” button to set the measured room temperature.
7. Confirm the value with “**√**”. A confirmation screen will be displayed briefly.
8. The thermostat will automatically return to “**Engineer Settings**”.

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Temperature Scale 1/3

This option allows you to set the minimum and maximum temperature to which the thermostat can be set – as well as the minimum and maximum limits for floor temperature.

Operating temperatures:

- Minimum Temperature Scale can be set between 5°C and 15°C.
- Maximum Temperature Scale can be set between 20°C and 40°C.
  (If "**Sensor Application**" is set to "**Floor**", a maximum temperature of 27°C can protect wooden floors from drying out. For precise information, please ask your flooring supplier).

Floor limit temperatures:

Floor limit temperatures allow you to set the lowest (Minimum Temp. Limit) and highest (Maximum Temp. Limit) permissible floor temperature during normal room temperature control. If floor temperature drops below the Minimum Temp. Limit, the thermostat will activate the heating system to maintain the temperature above the set minimum. If floor temperature rises above the Maximum Temp. Limit, the thermostat will deactivate the heating system to maintain the temperature below the set maximum.
Floor Limit temperatures are only available if "**Room/Floor Limit**" has been selected under "**Sensor Application**".

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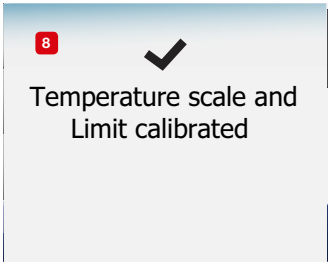
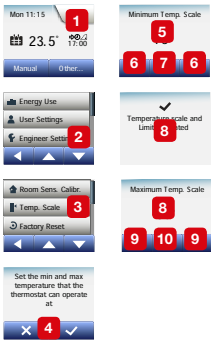
Temperature Scale 2/3





- Minimum Temp. Limit – use this setting to maintain a comfort temperature on tile floors. Can be set between 5°C and 25°C.
- Maximum Temp. Limit – use this setting to protect wooden floors from excessive temperatures. Can be set between 10°C and 40°C.

NOTE: If the maximum limit for floor temperature is set too high, sensitive floor types may be permanently damaged.

1. Tap the "**Menu**" button on the home screen.
2. Then tap the "**Engineer Settings**" button.
3. Scroll down and tap the "**Temp. Scale"** button.
4. Confirm that you want to set minimum and maximum operating temperatures for the thermostat by tapping "√" or cancel with "**X**".
5. If "√" is chosen, you can set a Minimum Temp.Scale.
6. Use the "**Up Arrow**" or "**Down Arrow**" button to change the Minimum Temp. Scale.
7. Confirm the setting with "√".
8. You can now set a Maximum Temp.Scale.
9. Use the "**Up Arrow**" or "**Down Arrow**" button to change the Maximum Temp. Scale.
10. Confirm the setting with "√".
    If "**Room/Floor Limit**" has been selected under "**Sensor Application**", proceed to step 10. Otherwise, proceed to step 16.

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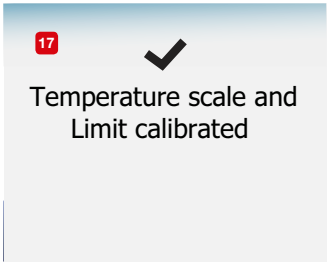
SUPERIOR FLOOR HEATING SYSTEMS

Temperature Scale 3/3



11. You can now set a Minimum Temp. Limit.
12. Use the “**Up Arrow**” or “**Down Arrow**” button to change the Minimum Temp. Limit.
13. Confirm the setting with “**√**”.
14. You can now set a Maximum Temp. Limit.
15. Use the “**Up Arrow**” or “**Down Arrow**” button to change the Maximum Temp. Limit.
16. Confirm the setting with “**√**”.
17. A confirmation screen will be displayed.
18. The thermostat will automatically return to “**Engineer Settings**”.

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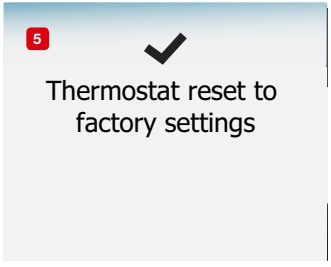
Factory Reset



This option allows you to restore the thermostat to factory settings.
Note! This action cannot be undone, and all your personal settings will be lost.

1. Tap the “**Menu**” button on the home screen.
2. Scroll down and tap the “**Engineer Settings**” button.
3. Tap the “**Factory Reset**” button.
4. Tap “**X**” if you want to maintain your settings and return to “**Engineer Settings**”. Tap “**Reset**” if you want to restore the factory settings.
5. The thermostat will then be reset and the “**Startup Wizard**” will appear on the screen.

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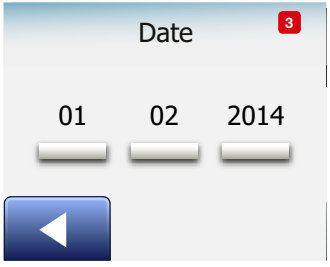
Startup Wizard 1/2



When the thermostat is powered up for the first time, or after a “Factory Reset” has been performed, the “Startup Wizard” will appear on the screen.

This allows you to enter the basic data required by the thermostat in order to operate.

1. Region – set the time region in which the thermostat is located.
   This parameter is used, for example, to ensure correct use of Daylight Saving Time.
   Tap the time region you are in.
   Confirm with “√”.

2. Language – set the language to be used on the thermostat display.
   Tap the “**Up Arrow**” or “**Down Arrow**” button to scroll up and down.
   Tap the language you prefer.
   Confirm with “√”.

3. Date – set the current date (is used for several functions).
   Tap the parameter you want to change.
   Tap the “**Up Arrow**” or “**Down Arrow**” button to set the day, month and year.
   Confirm each setting with “√”.

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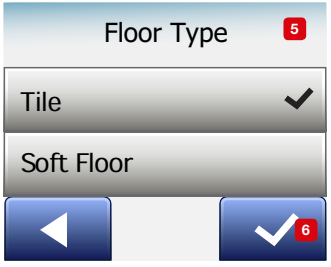
Startup Wizard 2/2



4. Time – set the current time.
   Tap the parameter you want to change.
   Use the "**Up Arrow**" or "**Down Arrow**" button to set the hours and minutes.
   Confirm each setting with "√".

5. Floor Type – choose between:
   Tile: floors made of tile or stone.
   Soft Floor: wooden or other engineered floors.

6. Confirm your choice with "√".

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Factory Settings

Preset temperatures:	
Operating mode	Factory preset temperature
Scheduled Operation	See Preset Schedule*
Manual Override	23°C*
Comfort Mode	23°C*
Boost Mode	Max °C ≤ Maximum Limit
Holiday Mode	5°C
Frost Protection	5°C

*You can change the settings for these temperatures to suit your needs – see Operating Modes in this manual.

Preset Schedule:

Event name	Event start	Target/setpoint temperature dependent on "Sensor Application"	
Work days:		**Floor**	**Room/Floor Limit**
Wake up	6:00	25°C	20°C
Leave home	9:00	20°C	15°C
Daytime home*	12:00	25°C	20°C
Daytime leave*	13:00	20°C	15°C
Come home	17:00	25°C	20°C
Go to sleep	22:00	20°C	15°C
Home days:		**Floor**	**Room/Floor Limit**
Wake up	8:00	25°C	20°C
Go to sleep	23:00	20°C	15°C

*Only available with 6-event schedule

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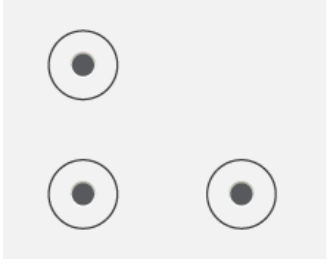
Troubleshooting 1/2



Error messages:

If a fault or error occurs, the thermostat will display one of the following error messages:

E0: Internal failure. The thermostat is defective. Contact your heating engineer. The thermostat must be replaced.

E1: Internal sensor defective or short-circuited. Contact your heating engineer. The thermostat must be replaced.

E2: External wired floor sensor disconnected, defective or short-circuited. Contact your heating engineer for reconnection or replacement.

E5: Internal overheating. Contact your heating engineer in order to have the installation inspected.

- Three circles containing dots are displayed on the screen; the thermostat cannot be operated.
  The thermostat is in “Child Lock” mode. See the section titled “Child Lock” in this manual for instructions on how to unlock it.

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Troubleshooting 2/2

- Why does a specific function not work in a specific mode?

Not all functions are available in all modes or make sense in all modes.

Mode vs function	Scheduled Operation	Manual	Boost	Comfort	Frost Pro-tection	Holiday	Eco
Open Window detection	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Floor comfort override sensor application	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Eco Function	Changes the home screen to display the Eco button instead of Manual	Not available	Not available	Not available	Not available	Not available	Not available

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Contact Data

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SUPERIOR FLOOR HEATING SYSTEMS

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